SUPPORT FOR THE AMENDMENT

Support for the amendment to claim 11 is found in claim 1 as currently amended. Support for claim 17 is found in claim 1 as originally presented. No new matter would be added to this application by entry of this amendment.

Upon entry of this amendment, claims 1-2 and 4-17 will now be active in this application.

REQUEST FOR RECONSIDERATION

The claimed invention is directed to a graft polyol having a bimodal particle size distribution, a method for preparing a graft polyol as well as a polyurethane comprising the same.

Applicants wish to thank examiner Cooney for the helpful and courteous discussion held with their U.S. representative on November 2, 2006. At that time, applicants' U.S. representative argued that the prior art failed to disclose a graft polyol having a bimodal distribution as claimed. The following is intended to expand upon the discussion with the examiner.

Graft polyols have been used in the preparation of polyurethane foams to increase the hardness of the resulting polyurethane foam. Graft polyol addition can have an adverse effect on cell opening behavior and flow behavior in the foam mold such that graft polyol containing polyurethanes having good cell opening behavior and flow behavior are sought.

The claimed invention addresses the problem by providing a graft polyol comprising small particles and large particles having a bimodal particle size distribution. Applicants have discovered that a graft polyol having a bimodal particle size distribution in which the **peaks do not overlap** having a small particle and large particle distribution as claimed

provides for advantageous properties when incorporated into a polyurethane composition. Such a graft polyol is nowhere disclosed or suggested in the cited prior art of record.

The rejection of claims 1-16 under 35 U.S.C. § 103(a) over EP 786,480 in view of Perry et al. (U.S. 6,127,443) is respectfully traversed.

None of the cited prior art of record discloses or suggests a graft polyol having a bimodal particle size distribution in which the peaks of the large and small particles do not overlap.

EP '480 merely describes a polymer polyol having a relatively small and having a narrow particle size distribution (page 1, lines 3-5 and page 3, lines 2-7). In describing a polymer polyol having a small particle size and a narrow particle size distribution, there is no suggestion of a graft polyol having a bimodal particle size distribution in which the peaks do not overlap.

Perry et al. merely describes a polyol component which is **at least bicompositional** having at least one high molecular weight portion and one low molecular weight portion (column 3, lines 17-19). There is no disclosure in this reference as to a bimodal particle size distribution in which the peaks do not overlap.

Moreover, even if Perry et al. were to have described a bimodal particle size distribution, there is no motivation to modify the polymer polyol of EP '480 to provide a bimodal distribution as to do so would be contrary to the express teachings of EP '480.

EP '480 describes a polymer polyol having a small particle size and **a narrow particle size distribution**. A narrow particle size distribution is a statement as to the desirability of uniform properties for the polymer particles. A bimodal particle size is inconsistent with a narrow particle size distribution as a bimodal particle size has two particle size distributions and therefore is nearly the opposite of a narrow particles size distribution. It would not be possible to modify the disclosure of EP '480 and provide a bimodal particle

size distribution as to do so would destroy the essential teachings of the primary references. Obvious modifications can not fly in the face of the express disclosure of the reference. As such the combination of cited references does not make obvious a graft polyol having a bimodal particle size distribution.

In contrast, the claimed invention is directed to a graft polyol having small and large particles having a bimodal particle size distribution in which the peaks of the large and small particles do not overlap. As the cited prior art fails to disclose or suggest a bimodal particle size distribution in which the peaks do not overlap, the claimed invention is clearly not obvious from these references and accordingly withdrawal of the rejections under 35 U.S.C. § 103(a) is respectfully requested.

The rejection of claims 1-16 under 35 U.S.C. § 112, second paragraph is respectfully traversed.

Applicants respectfully submit that the phrase "the peaks of the large and small particles ... do not overlap" is sufficiently clear to those of ordinary skill in the art such that the metes and bounds of the claimed invention is clear to those of ordinary skill in the art. A bimodal distribution in which the peaks "do not overlap" is illustrated in applicants' specification in Figures 3 and 4 in which bimodal particle size distributions according to the claimed invention are illustrated. It is clear that between the peaks there is **a volume fraction (%) which goes to zero**. Such is quite evident from the use of the term "do not overlap." A bimodal fraction in which there is overlap is illustrated in Figure 1. As the metes and bounds of the use of the term "do not overlap" is clear to those of ordinary skill in the art, withdrawal of the rejection under 35 U.S.C. § 112, second paragraph is respectfully requested.

The rejection of claim 3 under 35 U.S.C. § 112, second paragraph is now moot. Claim 3 has been now canceled without prejudice to further prosecution.

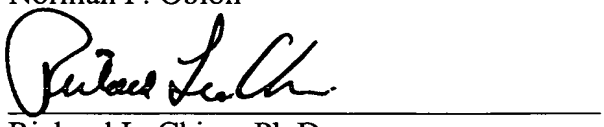
The rejection of claim 16 under 35 U.S.C. § 112, second paragraph has been obviated by appropriate amendment.

Claim 16 has been now amended to recite "a light scattering method" in view of the examiner's assertion of insufficient antecedent basis. However, applicants respectfully submit that the phrase "a light scattering method" is sufficiently clear to those of ordinary skill in the art such that the metes and bounds of the claims are clear. Those of ordinary skill in the art would understand the meaning of the phrase "the peaks of the large and small particles measured by a light scattering method **do not overlap**." As the meaning of the term is clear, withdrawal of this ground of rejection is respectfully requested.

Applicants submit that this application is now in condition for allowance and early notification of such action is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon



Richard L. Chinn, Ph.D.
Registration No. 34,305

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 03/06)

NFO:RLC\la